



Scientific Documentation

G9300, Glycerin (Glycerol) Natural,
bioCertified, USP, EP, BP, JP, FCC

Not appropriate for regulatory submission.
Please visit www.spectrumchemical.com or
contact Tech Services for the most up-to-date
information contained in this information
package.

Spectrum Chemical Mfg Corp

769 Jersey Avenue
New Brunswick, NJ 08901
Phone 732.214.1300

G9300, Glycerin (Glycerol) Natural, bioCertified, USP, EP, BP, JP, FCC

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- Kosher Certificate

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| | |
|-------------------|---|
| Item Number | G9300 |
| Item | Glycerin (Glycerol) Natural, USP, EP, BP, JP, FCC, bioCertified |
| CAS Number | 56-81-5 |
| Molecular Formula | C3H8O3 |
| Molecular Weight | 92.10 |
| MDL Number | |
| Synonyms | |

| Test | Specification | |
|--|---------------|-------------------------------------|
| | Min | Max |
| ASSAY (ANHYDROUS BASIS) (USP) | 99.0 | 101.0 % |
| Specific Gravity @ 25° (USP) | 1.249 | |
| Specific Gravity @ 25° (FCC) | 1.259 | |
| Specific Gravity @ 20° (EP) | 1.258 | |
| APPEARANCE OF SOLUTION (EP) | TO PASS TEST | |
| IDENTIFICATION: | | |
| INFRARED SPECTRUM (USP, EP, JP, FCC) | TO PASS TEST | |
| REFRACTIVE INDEX @ 20°C (EP, JP) | 1.470 | 1.475 |
| CHROMATOGRAM (USP, FCC) | TO PASS TEST | |
| DIETHYLENE GLYCOL (USP) | | 0.1 % |
| RELATIVE DENSITY (EP) | 1.258 | 1.268 |
| COLOR (USP, JP, FCC) | | TO PASS TEST |
| RESIDUE ON IGNITION (SULFATE ASH) (USP, EP, JP, FCC) | | 0.01 % |
| CHLORIDE Cl (USP, JP, FCC) | | 10 ppm |
| SULFATE (SO ₄) (USP, JP) | | 20 ppm |
| AMMONIUM (JP) | | TO PASS TEST |
| HEAVY METALS (JP) | | 5 ppm |
| LEAD (FCC) | | 1 mg/kg |
| CALCIUM (JP) | | TO PASS TEST |
| ARSENIC (JP) | | 2 ppm |
| ACROLEIN, GLUCOSE or other REDUCING SUBSTANCE (JP) | | TO PASS TEST |
| ORGANIC IMPURITIES/RELATED COMPOUNDS: | | |
| CHLORINATED COMPOUNDS (as Cl) (USP, FCC) | | 30 ppm |
| HALOGENATED COMPOUNDS (EP) | | 35 ppm |
| ESTER (EP) | | TO PASS TEST |
| FATTY ACIDS AND ESTER (JP) | | TO PASS TEST |
| FATTY ACIDS AND ESTER (USP, FCC) | | TO PASS TEST |
| INDIVIDUAL IMPURITIES (USP, JP) | | 0.1 % |
| TOTAL IMPURITIES (USP, JP) | | 1.0 % |
| IMPURITY A (EP) | | 0.1 % |
| RELATED SUBSTANCE (EP) | | RT <C3H8O3: 0.1%; RT >C3H8O3: 0.5 % |
| ACIDITY OR ALKALINITY (EP, JP) | | TO PASS TEST |

| | | |
|---|--|--------------|
| ALDEHYDES (EP) | | 10 ppm |
| SUGAR (EP) | | TO PASS TEST |
| READILY CARBONIZABLE SUBSTANCES (JP, FCC) | | TO PASS TEST |
| WATER (FCC) | | 1.0 % |
| ELEMENTAL IMPURITIES (USP, EP) | | AS REPORTED |
| IDENTIFICATION | | |
| APPEARANCE | | |
| RESIDUAL SOLVENTS | | TO PASS TEST |

Spectrum Chemical Mfg Corp

Corporate Headquarters:

769 Jersey Ave.
New Brunswick, NJ 08901
732.214.1300

West Coast Facility:

14422 S. San Pedro St.
Gardena, CA 90248
310.516.8000

SAFETY DATA SHEET

spectrum®



Revision date 08-July-2020

Revision Number 1

1. Identification

Product identifier

Product Name GLYCERIN (GLYCEROL) NATURAL, BIOCERTIFIED, USP, EP, BP, JP, FCC

Other means of identification

Product Code(s) G9300

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Spectrum Chemical Mfg. Corp.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

| | |
|-----------------------------------|-------------|
| Serious eye damage/eye irritation | Category 2B |
|-----------------------------------|-------------|

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

Causes eye irritation

Appearance viscous

Physical state Liquid

Odor Slight

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Other information

Causes mild skin irritation.

3. Composition/information on ingredients

Substance

| Chemical name | CAS No | Weight-% | Trade secret |
|---------------|---------|----------|--------------|
| Glycerin | 56-81-5 | 100 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

| | |
|-----------------------|--|
| General advice | Show this safety data sheet to the doctor in attendance. |
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Get medical attention if irritation develops and persists. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Skin contact | Wash skin with soap and water. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician. |

Most important symptoms and effects, both acute and delayed

Symptoms Prolonged contact may cause redness and irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No information available. |
| Hazardous combustion products | Carbon Monoxide, Carbon Dioxide. |
| Explosion data | |

Sensitivity to mechanical impact none.

Sensitivity to static discharge none.

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------------|-------------------|---|------------|
| Glycerin 56-81-5 | No data available | 15 mg/m ³ TWA 5 mg/m ³ TWA | - |

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection None required for consumer use. Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Liquid |
| Appearance | viscous |
| Color | clear; colorless |
| Odor | Slight |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|---|-------------------------|
| pH | no data available | None known |
| Melting point / freezing point | 19 - 20 °C / 66.2 - 68 °F | None known |
| Boiling point / boiling range | 290 °C / 554 °F | None known |
| Flash point | 160 °C / 320 °F | None known |
| Evaporation rate | no data available | None known |
| Flammability (solid, gas) | no data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | 0 | None known |
| Vapor density | 3.17 | None known |
| Relative density | 1.2613 - 1.2636 | None known |
| Water solubility | Soluble in water | None known |
| Solubility(ies) | Insoluble in Benzene Insoluble in Chloroform Insoluble in Carbon disulfide Insoluble in Carbon tetrachloride Insoluble in Petroleum ether | None known |
| Partition coefficient | -1.76 | None known |
| Autoignition temperature | 370 - 392 °C / 698 - 737.6 °F | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | no data available | None known |
| Dynamic viscosity | No data available | None known |
| <u>Other information</u> | | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |
| Softening point | No information available | |
| Molecular weight | 92.09 | |
| VOC Content (%) | No information available | |
| Liquid Density | No information available | |
| Bulk density | No information available | |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | No information available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | None known based on information supplied. |
| Incompatible materials | None known based on information supplied. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Inhalation | Specific test data for the substance or mixture is not available. |
| Eye contact | Specific test data for the substance or mixture is not available. Causes eye irritation. May cause redness, itching, and pain. |
| Skin contact | Specific test data for the substance or mixture is not available. Causes mild skin irritation. |
| Ingestion | Specific test data for the substance or mixture is not available. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|--|
| Symptoms | May cause redness and tearing of the eyes. Prolonged contact may cause redness and irritation. |
|-----------------|--|

Acute toxicity

Numerical measures of toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------------|-----------------------|---------------------|-------------------------------------|
| Glycerin 56-81-5 | = 12600 mg/kg (Rat) | 21900 mg/kg (Rat) | > 570 mg/m ³ (Rat) 1 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|--|
| Skin corrosion/irritation | May cause skin irritation. Classification based on data available for ingredients. |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Irritating to eyes. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Target organ effects | kidney, respiratory system, Eyes, Skin. |
| Aspiration hazard | No information available. |
| Other adverse effects | No information available. |
| Interactive effects | No information available. |

12. Ecological information

Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---------------------|----------------------|--|----------------------------|-------------------------------------|
| Glycerin 56-81-5 | - | LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss) | - | EC50: >500mg/L (24h, Daphnia magna) |

| | |
|--------------------------------------|---------------------------|
| Persistence and degradability | No information available. |
| Bioaccumulation | Inherently biodegradable. |

Component Information

| Chemical name | Partition coefficient |
|---------------|-----------------------|
|---------------|-----------------------|

| | |
|---------------------|-------|
| Glycerin 56-81-5 | -1.76 |
|---------------------|-------|

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT not regulated

TDG not regulated

MEX not regulated

ICAO (air) not regulated

IATA not regulated

IMDG not regulated

RID not regulated

ADR not regulated

ADN not regulated

15. Regulatory information

International Inventories

TSCA Complies

DSL/NDSL Complies

EINECS/ELINCS Complies

ENCS This product complies with ENCS:

IECSC This product complies with China:

KECL Complies

PICCS Complies

AICS All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Complies

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA

Health hazards 2

Flammability 1

Instability 0

Physical and chemical properties -

HMIS

Health hazards 2

Flammability 1

Physical hazards 0

Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling Maximum limit value

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEG L(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 08-July-2020
Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



Certification of Compliance with current Good Manufacturing Practices

Dear Valued Customer:

Spectrum Chemical Mfg Corp certifies that the following product(s) is produced, processed, packaged and held in compliance with current Good Manufacturing Practices (cGMP) in accordance with the applicable parts of 21 CFR, parts 210 and 211 of the Code of Federal Regulations.

| Catalog Number | Product Name |
|----------------|---|
| G9300 | Glycerin (Glycerol) Natural, bioCertified, USP, EP, BP, JP, FCC |

Spectrum is an FDA registered and inspected Drug Establishment. Our United States Food and Drug Administration (USFDA) Registration numbers are as follows:

Spectrum-Gardena, CA: 2020632
Spectrum-New Brunswick, NJ: 2246824

Thank you for your interest in Spectrum products. If we may be of further assistance, please feel free to contact the Quality Assurance department at 310-516-8000 or via email at qualityassurance@spectrumchemical.com

Sincerely,

Oralia Chavez
Quality Assurance Specialist



G9300, Glycerin (Glycerol) Natural, bioCertified, USP, EP, BP, JP, FCC

Source Statement

The above mentioned catalog item is derived from plant material- Palm. No animal derived products are used in the manufacturing process.

BSE/TSE Statement

The above mentioned catalog item does not contain nor is manufactured using any animal derived products and is therefore, BSE/TSE free.

Allergen Statement

The above mentioned catalog item does not contain any of the following:

- Milk
- Egg
- Fish
- Shellfish
- Tree Nuts
- Wheat
- Peanuts
- Cereals containing Gluten
- Celery
- Mustard
- Sesame Seed
- Sulfites > 10 ppm
- Soy

EU Fragrance Allergen Statement

The above mentioned catalog item does not contain any of the 26 EU fragrance allergens listed in Annex III lines 67-92. These substances are not intentionally added to the following chemical and therefore are not expected to be present.

GMO Statement

The above mentioned catalog item is manufactured without the use of genetically modified organisms and is therefore GMO free.

Melamine Statement

The above mentioned catalog does not use or add melamine to the manufacturing process and is considered melamine-free.

Nitrosamine Statement

Based on knowledge of the manufacturing process, nitrosamine impurities are not known or suspected to be present in this material.

Animal Testing Statement

The above mentioned catalog item has not been tested on animals.

Organic Compliance Statement

The above mentioned catalog item has not been produced using GMOs, irradiation, ethylene oxide (EtO) or sewage sludge.

Shelf Life Statement

The above mentioned catalog item is typically assigned a shelf life of 24 months from the date of manufacture. The actual assigned shelf life for any specific lot should be referenced on the Certificate of Analysis.

Other Chemicals Statement

Spectrum does not have any reason to suspect the above mentioned catalog item contains any of the following chemicals. This product does not come into contact with these chemicals during packaging or storage:

- Aflatoxins
- Antibiotics
- Bisphenol A (BPA)
- CMR Substances
- Parabens
- Pesticides
- Phthalates
- Preservatives



RE: Elemental Impurities - Glycerin (Glycerol) Natural, bioCertified, USP, EP, BP, JP, FCC (Cat# G9300)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned material complies with the USP<232>, <233> Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. No Class 1, Class 2A, Class 2B or Class 3 elemental impurities are likely to be present.

This information is subject to change and is intended for risk assessment only. It is responsibility of the end user to evaluate suitability of any chemical for the intended use as well as to assess compound-specific limits of daily intake of metal impurities. For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,

Technical Services
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.

CORPORATE HEADQUARTERS

769 Jersey Avenue
New Brunswick, NJ 08901
PHONE 732.214.1300
FAX 732.246.7132

WEST COAST FACILITY

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843



RE: Residual Solvents - Glycerin (Glycerol) Natural, bioCertified, USP, EP, BP, JP, FCC (Cat# G9300)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned catalog item complies with the requirements of the USP <467> Residual Solvents and the ICH Q3C Residual Solvents Guideline. No Class 1, Class 2, Class 3 or other solvents are used or produced in the manufacture of this product.

For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,

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WEST COAST FACILITY

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843

Label Information

The Spectrum label presents technical and safety information in an easily understood format. Our technical specialists stay abreast of the latest requirements of the Globally Harmonized System for Classification and Labelling of Chemicals (GHS), as well as the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA) and other government regulatory agencies in order to ensure compliance, accuracy and concise hazard communication.

A Retest Date: 03-31-2025

C **WARNING**
 • Causes eye irritation • Causes mild skin irritation.
 • Wash face, hands and any exposed skin thoroughly after handling.
FIRST AID: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. If skin irritation occurs: Get medical attention.
KEEP FROM CHILDREN
WARNING:
 Cancer and Reproductive Harm-
www.P65Warnings.ca.gov

L

spectrum®
 CHEMICAL MFG CORP

D **G9300** **F** **4 L**

E **Glycerin (Glycerol)**

N **KSA** **KOSHER** **P** **bio** **CERTIFIED**

H **USP, EP, BP, JP, FCC, bioCertified**

CAUTION: For manufacturing, processing or repacking.
Read and understand the label and Safety Data Sheet (SDS) prior to use.

Chemical Emergency: (800)424-9300
www.SpectrumChemical.com

J

C₃H₈O₃ **K** **F.W. 92.10**

| | |
|--------------------------------------|--------------|
| Assay (Anhydrous Basis) (USP) | 99.0-101.0% |
| Specific Gravity @ 25°C (USP) | Min. 1.249 |
| Specific Gravity @ 25°C (FCC) | Min. 1.259 |
| Specific Gravity @ 20°C (EP) | Min. 1.258 |
| Appearance of Solution (EP) | To pass test |
| Identification: | |
| Infrared Spectrum (USP, EP, JP, FCC) | To pass test |
| Refractive Index @ 20°C (EP, JP) | 1.470-1.475 |
| Chromatogram (USP, FCC) | To pass test |
| Diethylene Glycol (USP) | Max. 0.1% |
| Ethylene Glycol (USP) | Max. 0.1% |
| Relative Density (EP) | 1.238-1.268 |

MAXIMUM LIMITS

| | |
|---|--------------|
| Color (USP, JP, FCC) | To pass test |
| Residue on Ignition (Sulfated Ash) (USP, EP, JP, FCC) | 0.01% |
| Chloride (Cl) (USP, JP, EP) | 10 ppm |
| Sulfate (SO ₄) (USP, JP) | 20 ppm |
| Ammonium (JP) | To pass test |
| Heavy Metals (JP) | 5 ppm |
| Lead (FCC) | 1 mp/kg |
| Calcium (JP) | To pass test |
| Arsenic (JP) | 2 ppm |
| Acrolein, Glucose or Other Reducing Substance (JP) | To pass test |

Organic Impurities/Related Compounds:

| | |
|---|---|
| Chlorinated Compounds (as Cl) (USP, FCC) | 30 ppm |
| Halogenated Compounds (EP) | 35 ppm |
| Esters (EP) | To pass test |
| Fatty Acids and Esters (JP) | To pass test |
| Fatty Acids and Esters (USP, FCC) | To pass test |
| Individual Impurities (USP, JP) | 0.1% |
| Total Impurities (USP, JP) | 1.0% |
| Impurity A (EP) | 0.1% |
| Related Substances (EP) | RT-C ₂ H ₄ O ₂ : 0.1%; RT> C ₂ H ₄ O: 0.5% |
| Acidity or Alkalinity (EP, JP) | To pass test |
| Aldehydes (EP) | 10 ppm |
| Sugars (EP) | To pass test |
| Readily Carbonizable Substances (JP, FCC) | To pass test |
| Water (FCC) | 1.0% |
| Elemental Impurities (USP, EP) | As reported |
| Residual Solvents | To pass test |

HYGROSCOPIC: Keep tightly closed.

G 3/K1GHS **A** **O** **Lot No. 062233** **M**

SPECTRUM CHEMICAL MFG. CORP. Gardena, CA 90248 • New Brunswick, NJ 08901

- A** Bar Code
- B** GHS Hazard Pictograms
- C** Warning, Safety Data and Precautionary Information
- D** Product Catalog Number
- E** Item Name, Form, Grade
- F** Size/Quantity
- G** Chemical Abstracts Service (CAS) Registry Number
- H** Caution Information
- I** DOT Shipping Information
- J** Toll-Free 24-Hour Chemical Emergency Telephone Number
- K** Empirical Formula, Formula Weight and Technical Specifications Panel
- L** Expiration Information
- M** Lot Number
- N** Kosher Certified by Kosher Supervision of America (KSA).
- O** Storage Color Band
- P** Halal Certified by IFANCA
- Q** bioCertified

This color-coded band indicates the hazard most likely to be posed by that material under storage conditions. The criteria used to assign band colors have been established by the Storage Code working group of the Society for Chemical Hazard Communication (SCHC). It is recommended that like colors be stored together, unless otherwise stated, based on the color codes indicated to the right. However, it is the responsibility of the customer to check with their local fire department for possible conflicts with our recommendations when storing hazardous chemicals.

- YELLOW:** Oxidizer
- RED:** Flammable
- GREEN:** General Storage
- BLUE:** Health Hazard
- WHITE:** Corrosive

Spectrum Chemical Mfg Corp

Corporate Headquarters:

769 Jersey Ave.
 New Brunswick, NJ 08901
 732.214.1300

West Coast Facility:

14422 S. San Pedro St.
 Gardena, CA 90248
 310.516.8000



RE: Lot Numbering System

Dear Valued Customer:

This letter is to inform you of Spectrum Chemicals and Laboratory Products' Lot Numbering System. The system is based on an alpha-numerical sequence which provides the month, year and location of production.

The lot numbering system utilized until 2010 is a sequence of **six characters**, two letters followed by four numbers. The first letter represents the year, for example, Y denotes 2009 and Z denotes 2010. The second letter represents the month and site, for example, A-L denotes January through December at Spectrum's Gardena, CA facility, while M-X denotes January through December at the New Brunswick, NJ facility. The following four numbers are sequentially assigned.

Example: ZI0928 = The 928th material produced in California in September 2010

The lot numbering system utilized for 2011 and forward, is a sequence of **seven characters**. The first character, a number, represents the production facility:

- 1 = Gardena, CA Facility
- 2 = New Brunswick, NJ Facility
- 3 = China Facility
- 4 = Pharmacy, NJ Facility

The second character, a letter, represents the year. For example, A denotes 2011 and B denotes 2012. The third character, a letter, represents the month, with A denoting January and L denoting December. The following four numbers are sequentially assigned.

Example: 2AA0706 = The 706th material produced in New Jersey in January 2011

Thank you for your interest with Spectrum products. Please feel free to contact us at 310-516-8000 or via email at quality_assurance@spectrumchemical.com if we may be of further assistance.

Sincerely,

Oralia Chavez,
Quality Assurance Specialist

CORPORATE HEADQUARTERS

769 Jersey Avenue
New Brunswick, NJ 08901
PHONE 732.214.1300
FAX 732.246.7132

WEST COAST FACILITY

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843



KOSHER SUPERVISION OF AMERICA

בס"ד
Feb 01, 2021

The following product(s) prepared by the named company are certified kosher with the stated requirements:

Spectrum Laboratory Products, Inc.

S-0032

14422 S. San Pedro Street
Gardena CA 90248
USA

| | |
|------------------------|---|
| Product Name | G9300, Glycerin (Glycerol) Natural, USP, EP, BP, JP, FCC |
| Brand | Spectrum |
| UKD-ID | KSAV3-X6I6R35 |
| D/P/M | P |
| Symbol Required | KSA |

Special Conditions

This certificate expires on
Feb 01, 2022

Rabbi Binyomin Lisbon
Kashrus Administrator

Placing the KSA logo on products not listed above constitutes an un-authorized use of the KSA symbol, which is a federally registered trademark.